

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
ISOLATION AND COMPOSITION OF NOVEL GLYCOSIDASES

RELATED APPLICATIONS

This is a Divisional Application of U.S. Application No. 08/560,809 filed on 21 November 1995 which is a CIP of 08/596,250 filed 24 June 1996 (Patent No. 5,770,405 issued on 23 June 1998) which is the National Stage of PCT US94/10758 filed on 22 September 1994 which is a CIP of 08/126,174 filed 23 September 1993 (now abandoned).

TECHNICAL FIELD

The present invention relates to novel glycosidases and their uses.

BACKGROUND OF THE INVENTION

The recognition that carbohydrates play a key role in biological processes of living organisms has made their study of great importance for medicine and basic science. The understanding of carbohydrates has lagged behind that of other types of biological molecules because of the immense complexity and variety of these molecules and the lack of availability of analytic and synthetic tools that enable scientists to differentiate one form from another.

Forms of carbohydrates in nature.

In nature, carbohydrates exist as polymers known as polysaccharides, that consist of a series of monosaccharides that are covalently attached by glycosidic bonds to form both branched and linear macromolecules. In addition, polysaccharides or, more commonly, oligosaccharides may be coupled to macromolecules such as proteins or lipids to form glycoproteins or glycolipids. Unlike naturally occurring polysaccharides, the oligosaccharides associated with protein or lipid consist of a relatively small subset of monosaccharide types.